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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,497	10/27/2000	Ronald Coleman	CITI0192-US	3524

75127 7590 03/21/2011

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EXAMINER

AKINTOLA, OLABODE

ART UNIT

PAPER NUMBER

3691

NOTIFICATION DATE

DELIVERY MODE

03/21/2011

ELECTRONIC

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
6

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8 *Ex parte* RONALD COLEMAN  
9

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11 Appeal 2010-004097  
12 Application 09/697,497  
13 Technology Center 3600  
14

15  
16 Before MURRIEL E. CRAWFORD, HUBERT C. LORIN, and  
17 ANTON W. FETTING, *Administrative Patent Judges*.  
18 FETTING, *Administrative Patent Judge*.

19 DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE<sup>2</sup>

Ronald Coleman (Appellant) seeks review under 35 U.S.C. § 134 (2002) of a final rejection of claims 1-9, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

The Appellant invented a way of measuring financial risks associated with trading portfolios (Specification 1:6-9).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below [bracketed matter and some paragraphing added].

1. A method for identifying plausible sources of error in a risk assessment system, comprising:

[1] identifying at least one variable of the risk assessment system;

[2] determining a first hypothesis about the at least one variable;

[3] providing an initial probability of the first hypothesis about the at least one variable;

[4] identifying a change of value in the at least one variable of the risk assessment system;

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<sup>2</sup> Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed June 29, 2009) and Reply Brief ("Reply Br.," filed December 15, 2009), and the Examiner's Answer ("Ans.," mailed October 15, 2009).

- 1 [5] determining by probabilistic induction at least one cause of  
2 the change of value in the at least one variable of the risk  
3 assessment system, wherein the at least one cause is a plausible  
4 source of error; and  
5 [6] evaluating the initial probability of the first hypothesis  
6 based on the at least one cause.

7 The Examiner relies upon the following prior art:

Dumais	US 6,192,360 B1	Feb. 20, 2001
Matthews, Jr.	US 6,526,358 B1	Feb. 25, 2003
Fogel	US 6,542,905 B1	Apr. 1, 2003

8 Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as unpatentable over  
9 Fogel, Matthews, and Dumais.

10 ISSUES

11 The issue of obviousness turns on whether Matthews evaluates the initial  
12 probability of Fogel's first hypothesis based on at least one cause.

13 FACTS PERTINENT TO THE ISSUES

14 The following enumerated Findings of Fact (FF) are believed to be  
15 supported by a preponderance of the evidence.

16 *Facts Related to the Prior Art*

17 *Fogel*

18 01. Fogel is directed to identifying data integrity issues and  
19 showing how they can be resolved. Fogel 3:33-36.

20 02. Data integrity issues are patterns of items that could not result  
21 from accurate assessment or are unlikely to arise. Fogel 5:41-49.

03. Fogel describes some of the emergent patterns that would suggest data validity or integrity in columns 5 and 6.

04. Fogel describes some of the tests used to discern such emergent patterns at columns 9 and 10.

*Matthews*

05. Matthews is directed to an automated computer based data integrity auditing system. Matthews 2:1-17.

06. Matthews describes the use of a hypothesis tester with a Bayesian likelihood ratio test to determine when an alternate hypothesis becomes more likely. Matthews 6:19-27.

*Dumais*

07. Dumais is directed to determining whether an object belongs to a particular category. Dumais 1:7-9.

08. Dumais describes how Bayesian networks operate. Dumais 3:35 – 4:42.

ANALYSIS

We are unpersuaded by the Appellant's argument that the art fails to describe limitation [6] of evaluating the initial probability of the first hypothesis based on the at least one cause. Appeal Br. 2-3.

Basically, Fogel describes a mechanism for evaluating data integrity (FF 01). The fundamental assumption is there are no data integrity issues until a pattern suggesting such an issue arises. FF 02 and 03. So, Fogel identifies its data as a set of variables whose risk of data integrity is to be assessed, and

1 the patterns that data presents. Fogel's first hypothesis is that there are no  
2 data integrity problems. The probability is exactly 100% until a pattern  
3 suggesting otherwise emerges. The patterns that emerge from such data are  
4 monitored and a pattern change that suggests data integrity issues are  
5 identified. So far, Fogel describes limitations [1]-[4]. Now Fogel tests the  
6 data to determine the likely cause of the emergent pattern. FF 04. Fogel  
7 leaves the implementation details to one of ordinary skill.

8 To describe how one of ordinary skill would have tested the data in  
9 Fogel, the Examiner cited Matthews which show the use of a hypothesis  
10 tester with a Bayesian likelihood ratio test to determine when an alternate  
11 hypothesis becomes more likely. FF 06. Thus, Matthews describes how one  
12 of ordinary skill would have implemented Fogel's test to perform limitation  
13 [5]. So far, none of these limitations are under contention.

14 Limitation [6] under contention requires evaluating the initial probability  
15 of the first hypothesis. The Appellant has not limited the manner of  
16 evaluation, as the Examiner found at Ans. 6. Matthews clearly performs  
17 such an evaluation when it selects an alternate hypothesis, which implicitly  
18 rejects the first hypothesis. The Examiner brought in Dumais to clarify the  
19 nature of Matthews' Bayesian test. FF 08. The Appellant argues that  
20 Matthews selects a hypothesis. Reply Br. 4. As may be, but Matthews'  
21 selection implicitly evaluates the initial hypothesis in so doing.

## 22 CONCLUSIONS OF LAW

23 Rejecting claims 1-9 under 35 U.S.C. § 103(a) as unpatentable over  
24 Fogel, Matthews, and Dumais is not in error.

DECISION

To summarize, our decision is as follows.

- The rejection of claims 1-9 under 35 U.S.C. § 103(a) as unpatentable over Fogel, Matthews, and Dumais is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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